

# CASE STUDY: COUNTY OF ARLINGTON DENSITY BONUS PROGRAM

## 1. THE POLICY

### Program Requirements

The density bonus provided by the County of Arlington depends of the level of LEED® certification.

LEED Certification	Floor-to-Area (FAR) Increase
LEED® Certified	0.15
LEED® Silver	0.25
LEED® Gold or Platinum	0.35

The program will allow the County Board to consider a modification of use regulation for additional density between 0.15 and 0.35 FAR and/or additional height up to 3 stories for special exception site plan requests. The site plan proposal must guarantee a LEED® Certified rating or above (Silver, Gold, or Platinum).

The provision of LEED® certified green building components does not guarantee additional density and/or height, or any particular amount of density or height. Site plan requests for bonus density and/or height will be analyzed on a case-by-case basis based on the characteristics of individual sites. The provision of LEED® certified green building components will be a part of the typical site plan negotiations for environmental amenities in exchange for the requested bonuses.

The program is scheduled for a revision in December 2008, which may result in the inclusion of specified LEED® credits pertaining to energy, water efficiency, heat island effect, construction waste, and stormwater as qualifying criteria for the program in 2009. Additionally, the policy may be revised so that bonus density is only offered to buildings seeking LEED® Silver certification or above, thus eliminating the bonus density for LEED® Certified status.

### Disclosure Qualifications

A developer requesting a density bonus must submit a LEED® scorecard and proof of LEED® registration along with the proposed site plan. If the requested bonus is approved, the County includes a formal condition in the site plan requiring the building to incorporate the green building measures. The site plan condition does not specify the exact LEED® credits that have to be met, but rather specifies a total number of LEED® credits. The specific credits can change through the process, but the total number must be achieved.

In addition to requiring a LEED® Accredited Professional working on the project, the County's own green building program staff undertake several reviews during the site plan and permitting processes, to ensure the projects achieve their selected LEED® criteria.

### Enforcement

The policy is enforced through a performance bond, or a financial bond that the County requires to guarantee compliance with the green building requirements of the incentive program. In 2005, the County revised the formula for calculating the bond to more fully capture the market value of bonus density awarded to the project. The new formula is: "(FAR value per ft<sup>2</sup>) x (Bonus Density Space)," and the "FAR value per ft<sup>2</sup>" is calculated annually by the County for the purposes of property assessment. If the project fails to obtain LEED certification or misses four or more points, 100% of the bond is forfeited; achieving LEED® certification but missing up to 3 points results in forfeiture of 50% of the bond.

## 2. ENERGY EFFICIENCY POTENTIAL

### 2.1. Policy Uptake

A significant percentage of current projects are taking advantage of the financial incentive. As of early 2008, County officials estimated that roughly 10 of approximately 25 site plan projects being processed were pursuing LEED® certification. In light of the fact that compliance with Arlington County codes will itself earn projects many LEED® credits, the County may consider increasing the minimum green building level required to qualify for the incentive.

## **2.2. Energy Saving Potential**

The energy saving potential of this program at the project level is substantial – LEED® certified projects can achieve anywhere from 15%-50% energy reduction over baseline. As evidenced by the policy uptake, the basic financial incentive of increased FAR is sufficient to entice some developers to comply with the green building stipulations. City officials speculate that many of the participating developers did not enter into the process with much experience in green building. City officials claimed that the financial incentive of the density bonus was a key determinant in improving the performance of qualified buildings. This view was confirmed by Keech Co., as their decision to pursue LEED® certification was based, in great part, on the financial incentive of the additional rentable floor space. The decision to certify the Navy League Building at the LEED® Silver level has resulted in a 20% improvement in energy efficiency.

Currently, there is no monitoring or evaluation component to the program. City officials identified the need to verify actual building performance post-occupancy, and have had preliminary discussions as to how a monitoring and enforcement program may be incorporated. No recommendations on the monitoring and evaluation mechanism have been decided upon.

## **3. COST OF IMPLEMENTATION**

### **3.1. Program Cost to the City**

The initial program cost was negligible, as there was no additional staff hired to oversee the program. Since that time one new staff member has been hired. The current program administrator commented that the program could use two or three more staff to have the capacity to handle the anticipated number of applicant reviews.

### **3.2. Cost to the Developer**

The cost of qualifying for the Density Bonus program varied according to development type, size, and location. According to the program manager, the cost to developers ranged from 0-1% for LEED® Certified to 3-6% for LEED® Gold. According to Keech, Co. the cost of achieving a LEED® Silver certification was less than 1% of total project cost (~\$200,000) for their Navy League Building. These costs were more than recouped by the 12,000 additional office space that they have been able to lease at above market rates, resulting in more than \$400,000 in additional lease revenue per year.

## **4. ADMINISTRATIVE FEASIBILITY**

### **4.1. Administering Agency**

The Environmental Planning Office, which has primary responsibility for working with applicants, reviewing green building documentation, and ensuring compliance, is located within the Department of Environmental Services. This office coordinates with the County's planning and building inspection staff, located within a separate agency, the Department of Community Planning, Housing and Development. Officials note that inter-agency coordination has presented a challenge for implementing the policy, because one office handles policymaking and document review functions, and another office handles permitting/inspection functions. The program has overcome this challenge by devoting considerable resources to working with applicants in the early phases of project review, and by providing strong financial incentives for projects to obtain LEED® certification.

### **4.2. Ease of Initiation**

The program did not require extensive policy research and development or stakeholder involvement prior to implementation. As the program is implemented by a separate team of zoning and LEED® specialists, it had little effect on the existing permitting process.

### **4.3. Educational Outreach Requirements**

In coordination with other green building incentive programs, Arlington County provided training on the LEED® system for 35 County staff, including planners and inspectors, and has also held numerous workshops for other communities.

## 5. STAKEHOLDER IMPACTS

### 5.1. Acceptability to the Developer

The financial performance of a project is highly dependent on its revenue generating potential. A density bonus allows a developer to add rentable or saleable floor space to their buildings, thus improving its revenue generation. The key in understanding why this is a financially advantageous strategy concerns the marginal cost of adding the additional floor space and the marginal cost of meeting a specified LEED® standard. First, the cost of constructing the additional floor space is marginally less than developing that same amount of floor space as a separate building, with separate land and permitting costs. Secondly, the additional floor space will add more revenue than it cost the developer in a green building premium. Consequently, the density bonus is a popular policy among developers, as evidenced by the high policy uptake rates.

Developer, Keech, Co., emphasized their enthusiasm for the program, which they claimed was key in differentiating their building from other new buildings entering the market, and has resulting in very attractive financial rewards from the 12,000 square feet of additional floor space that was added to the Navy League Building.

## 6. REFERENCES

Joan Kelsch, Environmental Planner, Arlington County

Bill Keech, Developer, Keech, Co.